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PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: DIAZ CARMENA ET AL-1 PCT

SERIAL NO: 10/524576

EXAMINER: R. Deberandinis

FILED: February 15, 2005

GROUP: 2836

TITLE: X-Ray Device

**INFORMATION DISCLOSURE STATEMENT**

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicants wish to bring to the attention of the Patent Examiner the references listed on the enclosed Form PTO-1449. These references were cited in the International Search Report, an English language copy of which is enclosed.

The following are English translations of the abstracts for the non-English references:

FR2682830: An electrical charging device for a capacitive bank is produced by using, on the one hand, a leakage transformer, known as a saturated-iron leakage transformer, because the leakage inductance of this transformer makes it possible to limit the charging current drawn by the capacitive bank, when the capacitive bank has been discharged. It is shown that the use of such a transformer makes it possible to avoid the use of an expensive and bulky series inductor. Moreover, in order to obtain reproducibility and perfect limiting of the modulation of the high voltage available on the capacitive bank, a synchronous static relay is used, driven by a drive circuit moreover providing a function of regulating the voltage available on the bank. It is shown that the use of this static relay makes it possible to reduce the number of capacitors necessary to satisfy reduced ripple conditions.

JP9180895: PROBLEM TO BE SOLVED: To provide an X-ray power source device by which electric power capacity of a commercial AC power source can be reduced and which can be installed in the small hospital by supplying it to an inverted by superimposing the voltage obtained by a rectifying

smoothing circuit and the voltage of a capacitor bank. SOLUTION: First of all, minimum input voltage capable of rated output of an inverter 14 is set to DC 350V, and preset voltage of charged voltage of a capacitor bank 5 is set to DC 350V, and conversion efficiency is set to 70%. When minimum voltage AC 180V of commercial AC power source rated AC 200V is inputted to a rectifying smoothing circuit 4 composed of a rectifier 2 and a smoothing capacitor 3, the smoothing capacitor 3 is charged to DC 240V. The capacitor bank 5 is charged to DC 310V by a charging circuit 9 composed of a switch element 7, an inductance 6 and a commutation diode 8. Since voltage by superimposing the voltage of the rectifying smoothing circuit 4 and the voltage of the capacitor bank 5 becomes DC 550V, the superimposed voltage is supplied to the inverter 14, and high voltage is impressed on an X-ray tube 17.

Since this Information Disclosure Statement (IDS) is being filed after a first Office Action, the Commissioner is hereby authorized to charge Deposit Account No. 03-2468 for the fee of \$180.00 and any additional fees or credit any overpayment in connection with this IDS. It is respectfully requested that the foregoing IDS be incorporated into the official file of the present patent application.

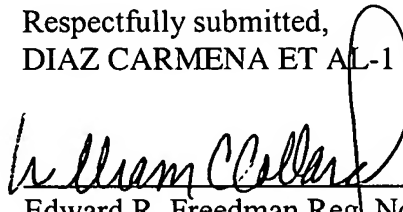
COLLARD & ROE, P.C.  
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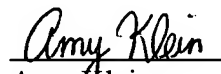
ea

Enclosures: PTO-form 1449 w/copies of four (4) references.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop: AMENDMENT, Commission for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 29, 2007.

Respectfully submitted,  
DIAZ CARMENA ET AL-1 PCT

  
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FORM PTO-1449 (REV. 7-80)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO.: <b>Diaz Carmena ET AL 1 PCT</b>	SERIAL NO. <b>10/524,576</b>
LIST OF REFERENCES CITED BY APPLICANT  (Use several sheets if necessary)		APPLICANT: <b>Diaz Carmena ET AL</b>	
		FILING DATE: <b>Feb. 15, 2005</b>	GROUP: <b>2836</b>

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO
AL	FR 2 682 830	04/1993	France			
AM	WO 01/76049	10/2001	International			
AN	WO 02/35692	05/2002	International			
AO	JP 09/180895	07/1997	Japan			
AP						

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AQ	
	AR	
	AS	

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.